MECHANICAL & BIOMEDICAL ENGINEERING
COURSE PLAN BY SEMESTER

Catalog Year
2012—2013

STARTING WITH MATH 147

FIRST YEAR

Fall Semester			Spring Semester		
UF 100	Intellectual Foundations	3	ENGR 120	Introduction to Engineering	3
DLV	Visual and Performing Arts Elective	3	CHEM 111	College Chemistry and Lab	3
ENGL 101	English Composition	3	CHEM 111L	College Chemistry Lab	1
MATH 147	Precalculus	5	MATH 170	Calculus I	4
			ENGL 102	English Composition	3
	TOTAL CREDITS	**14**		**TOTAL CREDITS**	**14**
Summer Semester					
MATH 175	Calculus II	4		**TOTAL CREDITS**	**4**

SECOND YEAR

Fall Semester			Spring Semester		
PHYS 211	Mechanics, Waves, and Heat	4	PHYS 212	Electricity, Magnetism, and Optics	4
PHYS 211L	Mechanics, Waves and Heat Lab	1	PHYS 212L	Electricity, Magnetism, and Optics Lab	1
ME 105	Mechanical Engineering Graphics	3	ENGR 210	Engineering Statics	3
MATH 275	Multivariable and Vector Calculus	4	MATH 333	Differential Equations and Matrix Theory	4
UF 200	Civic and Ethical Foundations	3	ENGR 245	Introduction to Materials Science and Engineering	3
			ENGR 245L	Introduction to Materials Science and Engineering Lab	1
	TOTAL CREDITS	**15**		**TOTAL CREDITS**	**16**
Summer Semester					
ME 297 *or* COMPSCI 117*	Introduction to Computations for Engineers *or* Introduction to C++*	3		**TOTAL CREDITS**	**3**

THIRD YEAR

Fall Semester			Spring Semester		
ENGR 220	Engineering Dynamics	3	ME 320	Heat Transfer	3
ENGR 330	Fluid Mechanics	3	ME 352	Machine Design I	3
ENGR 331	Fluid Mechanics Lab	1	ME 380	Kinematicss and Machine Dynamics	4
MATH 360 *or* MATH 361	Engineering Statistics *or* Probability & Statistics	3	ENGL 202	Technical Communication	3
ENGR 320	Thermodynamics I	3	ENGR 240	Introduction to Circuits	3
ENGR 350	Engineering Mechanics of Materials	3			
	TOTAL CREDITS	**16**		**TOTAL CREDITS**	**16**

FOURTH YEAR

Fall Semester			Spring Semester		
ME 481	Senior Design Project I	3	ME 483	Senior Design Project II	3
ME 424	Thermal & Fluids Systems Design	3	ME 310	Experimental Methods Lab	2
ME 462	Machine Design II	3	ME	ME Program Elective	3
ME	ME Program Elective	3	Tech Elective	Upper-Division Technical Elective	3
DLL	Literature and Humanities Elective	3	DLS	Social Science Second Field Elective	3
	TOTAL CREDITS	**15**		**TOTAL CREDITS**	**14**

TOTAL CREDITS: 127

For questions about program requirements, please contact your advisor. Boise State recommends that you meet with an advisor annually to ensure that problems are identified and resolved quickly.

In this instance, either course meets the requirement.

Rev. 2/12

MECHANICAL & BIOMEDICAL ENGINEERING
COURSE PLAN BY SEMESTER

Catalog Year
2012—2013

STARTING WITH MATH 170

FIRST YEAR

Fall Semester			Spring Semester		
CHEM 111	College Chemistry	3	ME 105	Mechanical Engineering Graphics	3
CHEM 111L	College Chemistry Lab	1	ENGL 102	English Composition	3
ENGL 101	English Composition	3	MATH 175	Calculus II	4
ENGR 120	Introduction to Engineering	3	PHYS 211	Mechanics, Waves & Heat	4
UF 100	Intellectual Foundations	3	PHYS 211L	Mechanics, Waves & Heat Lab	1
MATH 170	Calculus 1	4			
	TOTAL CREDITS	**17**		**TOTAL CREDITS**	**15**

SECOND YEAR

Fall Semester			Spring Semester		
PHYS 212	Electricity, Magnetism & Optics	4	MATH 275	Multiple Variable & Vector Calculus	4
PHYS 212L	Electricity, Magnetism & Optics Lab	1	ENGR 220	Engineering Dynamics	3
MATH 333	Differential Equations and Matrix Theory	4	ENGR 245	Introduction to Material Science & Engineering	3
ENGR 210	Engineering Statics	3	ENGR 245L	Introduction to Material Science & Engineering Lab	1
UF 200	Civic and Ethical Foundations	3	ENGR 320	Thermodynamics I	3
			ME 297 *or* COMPSCI 117*	Introduction to Computations for Engineers *or* Introduction to C++*	3
	TOTAL CREDITS	**15**		**TOTAL CREDITS**	**17**

THIRD YEAR

Fall Semester			Spring Semester		
MATH 360 *or* MATH 361*	Engineering Statistics *or* Probability and Statistics*	3	ME 380	Kinematics & Machine Dynamics	4
ENGR 330	Fluid Mechanics	3	ME 320	Heat Transfer	3
ENGR 331	Fluid Mechanics Lab	1	ME 310	Experimental Methods Lab	2
ENGR 350	Engineering Mechanics of Materials	3	ME 352	Machine Design I	3
ENGR 240	Introduction to Circuits	3	DLV	Visual and Performing Arts Elective	3
ENGL 202	Technical Communication	3			
	TOTAL CREDITS	**16**		**TOTAL CREDITS**	**15**

FOURTH YEAR

Fall Semester			Spring Semester		
ME 481	Senior Design Project I	3	ME 483	Senior Design Project II	3
ME 424	Thermal & Fluids Systems Design	3	ME	ME Program Elective	3
ME 462	Machine Design II	3	Tech Elective	Upper-Division Technical Elective	3
ME	ME Program Elective	3	DLS	Social Science Second Field Elective	3
DLL	Literature and Humanities Elective	3			
	TOTAL CREDITS	**15**		**TOTAL CREDITS**	**12**

TOTAL CREDITS: 122

For questions about program requirements, please contact your advisor. Boise State recommends that you meet with an advisor annually to ensure that problems are identified and resolved quickly.

In this instance, either course meets the requirement.

Rev. 2/12